

DETAILED ACTION

1. This final action is in response to the amendment filed on: 01/26/2011.
2. Claims 25-28 are pending. Claims 1-24 are cancelled. Claims 25 and 27 are independent claims.
3. Claims 25 and 27 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata, in view of Kobayashi2.
4. Claims 26 and 28 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata, in view of Kobayashi2, in further view of Kobayashi.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25 and 27 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata (US Patent: 5,896,203, issued: Apr. 20, 1999, filed: Apr. 3, 1996), in view of Kobayashi2 (US Application: 2004/0083260 A1, published: Apr. 29, 2004, filed: Nov. 26, 2003).

With regards to claim 25, Shibata teaches:

A scanner processing unit constructed to optically scan an original and generate a first image data in a first data format which is a RAW format (column 9, lines 5-12: whereas,

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a scanner generates image data in RAW format)

A memory management unit constructed to generate a single page management record for managing the first image data (column 9, lines 30 - 41: whereas for each page there is a page management information as shown in Fig 7a, 7b).

an encoding unit constructed to generate a second image data from the first image data, in a second data format other than the RAW format (column 9, lines 24-26: whereas, the raw image data is converted/encoded into MMR image data).

a first data processing unit constructed to execute a first predetermined processing using the first image data in the RAW format (column 9, lines 12-30: whereas, there is a raw image processor, to encode raw images into MMR and flag/code/mark progress appropriately via CM type codes);

a second data processing unit constructed to execute a second predetermined processing using the second image data in the second format (column 13, lines 12-21, Fig 12, column 13, lines 25-30: whereas the second image data in a second MMR format is processed to be stored in a temporary buffer, and the output image data is

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processed by a transmission algorithm and appropriately placed in a transmission buffer, until all contents are transmitted).

wherein the memory management unit causes the single page management record to manage the second image data in association with the first image data, such that the first image data and the second image data are managed together (Fig 7A, 7B, whereas page management data includes other status type management data to keep track of which part of a page is in raw format (unencoded), and which part of a page has been converted into MMR format, through the use of CM codes (column 9, lines 12-30), as well as the status of image data (column 9, lines 40-41) the first image data and second image data is managed by ID's and also flags in temporary memory)

However, Shibata does not expressly teach *wherein the first and second image data represent the same image; wherein the memory management unit manages the single page management record so that the single page management record can be accessed in parallel by the first and the second data processing units, wherein the memory management unit deletes the single page management record in a case that (a) a delete request of the page management record is received from at least one of the first data processing unit or the second data processing unit and (b) neither of the first data processing unit or the second data processing unit is referring to the single page management record.*

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Yet, Kobayashi2 teaches *wherein the first and second image data represent the same image* (paragraphs 0231, 0233, 0234: whereas, a first image data can be of a print format, and a second image is of a scanner format representing the same image); *wherein the memory management unit manages the single page management record so that the single page management record can be accessed in parallel by the first and the second data processing units, wherein the memory management unit deletes the single page management record in a case that (a) a delete request of the page management record is received from at least one of the first data processing unit or the second data processing unit and (b) neither of the first data processing unit or the second data processing unit is referring to the single page management record* (paragraphs 0233, 0234: whereas multiple processes can access image data, and the page management image data is removed, upon a completion/finish/delete request when neither first or second processing units are referring to the single record).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Shibata's method for managing image data, such that the management record can be accessed in parallel by first and second processing units, and further deleting the management record upon a signal/request, as taught by Kobayashi2. The combination of Shibata and Kobayashi2 would have allowed Shibata to have "implemented a multifunction machine/server system incorporating equal or more functions than prior art multifunction machines [by] dealing with an electronic document at a higher efficiency" (Kobayashi2, paragraph 0021).

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With regards to claim 27, for a method that is similar to the method performed by the apparatus of claim 25, is rejected under similar rationale.

6. Claims 26 and 28 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata (US Patent: 5,896,203, issued: Apr. 20, 1999, filed: Apr. 3, 1996), in view of Kobayashi2 (US Application: 2004/0083260 A1, published: Apr. 29, 2004, filed: Nov. 26, 2003), in further view of Kobayashi (US Application: 2002/0051212 A1, published: May 2, 2002, filed: Sep. 6, 2001, EEFD Sep. 8, 2000).

With regards to claim 26, which depends on claim 25, the combination of Shibata and Kobayashi2 teaches *the second data format*, as similarly explained in rejection for claim 25, and is rejected under similar rationale.

However, the combination does not expressly teach the second data format *is a JBIG format*.

Yet, Kobayashi teaches the second data format *is a JBIG format* (Abstract: whereas JBIG is the second format from encoding).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Shibata and Kobayashi2's method for managing and processing images, such that one of the images being managed/processed, would further include JBIG format, as taught by Kobayashi. The combination would have

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allowed Shibata to have “efficiently managed/used memory, when managing page information” (Kobayashi, paragraph 0006).

With regards to claim 28, for a method that is similar to the method performed by the apparatus of claim 26, is rejected under similar rationale.

Response to Arguments

7. Applicant's arguments filed 01/26/2011 have been fully considered but they are not persuasive.

8. The applicant first argues that the proposed combination would render Shibata unsuitable for its intended purpose because “first and second image data in Shibata would consist of different pages [and] modifying Shibata such that the first and second image data represent the same image, as allegedly suggested by Kobayashi”²⁶⁰, would destroy the unique data of either page 1 or page 2”.

9. However, the examiner respectfully appears to have misinterpreted the rejection, and the examiner points out that the previous rejection says nothing about destroying or removing data unique corresponding to original-page/document 1 or original-page/document 2, but rather that Shibata's method for *managing* one or more documents/original-pages of image data can be further modified, such that method of memory *management* can further *manage* one or more image pages of data in a parallel manner *for each* original page/document (paragraph 0215: whereas the original image data, as well as compressed image data (an alternate representation of the same

original data) are managed/used/stored in memory for a *particular* original page/document. The image and compressed image data can be accessed in a parallel/concurrent/simultaneous manner, as further explained in paragraph 0092. Furthermore, separate image data can also be stored in memory as well (paragraph 0217)). Thus, Kobayashi does not seek to remove data for page data for *other* original-pages/documents, but rather is used to allow more than one representation (such as compressed image data) for *each* original-page/document. In other words, Kobayashi *supports* use of original and compressed versions of pages to be stored in memory for *each particular document*, and *improves* upon Shibata's method (rather than destroy Shibata's method).

10. The applicant argues that the cited portions of Kobayashi '260 are not seen to disclose or suggest that each of these different types of images are managed by a single record, much less by a single page management record such that single page management record can be accessed in parallel by first and second data processing units.

11. However, this argument is not persuasive since each original image/document has original image data, as well as an alternate/compressed image data (paragraphs 0092 and 0215), and the image data and alternate image data are at the very least *grouped* together (and thus logically referred to as a single record), since *both are* designated for deletion/removal when processes no longer reference/act upon the image data and the alternate/compressed image data (paragraph 0234).

12. The applicant argues that the cited portions of Kobayashi '260 merely disclose deleting 'the image data', much less a single page data management record [and] moreover the applicant argues that Kobayashi '260 simply discloses deleting the image data 'upon end of all the processes" [and thus] Kobayashi '260 is also not seen to disclose or suggest conditioning deleting based on receipt of a delete request.

13. However, the examiner points out that the claim language does not require a particular type of "request" for deletion, and since Kobayashi '260 teaches that upon a condition a command/request is implemented to ultimately perform a deletion of stored image data. Therefore, without further clarification as to the type of request the applicant is requiring, Kobayashi '260 still reads upon the applicant's argued claim language.

14. The applicant argues that the other claims in the application that depend either directly or indirectly upon the independent claims are allowable for reasons similar to the reasons argued for the independent claims.

15. However, this argument is not persuasive since the independent claims have been shown/explained to be rejected, as similarly explained above.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILSON TSUI whose telephone number is (571)272-7596. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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